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**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Inter application of

Docket No: Q61244

Taizo AKIMOTO

Appln. No.: 09/749,752

Group Art Unit: 1634

Confirmation No.: 4934

Examiner: Jeanine A. Goldberg

Filed: December 28, 2000

For: TEST PIECE, ANALYSIS METHOD USING THE TEST PIECE, AND ANALYSIS  
SYSTEM USED FOR THE METHOD

**SUBMISSION OF APPEAL BRIEF**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. A check for the statutory fee of \$340.00 is attached. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

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WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: November 23, 2004



**PATENT APPLICATION**

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SYSTEM USED FOR THE METHOD

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

**I. REAL PARTY IN INTEREST**

The real party in interest in this appeal is Fuji Photo Film, Co., Ltd. of Japan, by virtue of an assignment executed by Taizo Akimoto ("Appellant" hereafter) on December 14, 2000, and recorded by the Assignment Branch of the U.S. Patent and Trademark Office. The assignment was recorded on December 28, 2000 at Reel 011413, Frame 0704.

**II. RELATED APPEALS AND INTERFERENCES**

To the knowledge and belief of Appellant, the Assignee, and the undersigned, there are no other appeals or interferences before the Board of Appeals and Interferences that will directly affect or be affected by the Board's decision in the instant Appeal.

**III. STATUS OF CLAIMS**

Claims 1-6, 9, and 12-17 are canceled.

Claims 7, 8, 10, 11 and 18-21 are rejected.

The rejections of claims 7, 8, 10, 11, and 18-21 are being appealed.

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**IV. STATUS OF AMENDMENTS**

All Amendments are believed to have been previously entered and made of record.

**V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

Independent claim 8 recites an analysis system 50 (FIG. 9) for analyzing a target substance by causing the target substance marked with a marker to bind selectively to some of plural types of probes arranged and fixed on a test piece 1 (FIGS. 2 and 4-6) and detecting positions of the probes to which the target substance has bound comprising: means 53 (FIG. 9) (page 6, lines 24-26) for attaching management information peculiar to the test piece 1 to a predetermined location 20 (FIG. 2) (page 6, lines 3-5) on the test piece using a marker the same as or similar to the marker used for marking the target substance (page 8, lines 1-15; page 25, lines 15-24; page 27, lines 24-26; page 32, lines 4-7); means 54 (FIG. 9) for obtaining information concerning the positions of the probes to which the target substance has bound (page 25, lines 24-26; page 28, lines 1-8; page 30, lines 6-15) and simultaneously detecting the management information attached to the test piece (page 32, lines 7-11 and line 21 - page 33, line 1); and means 60 (FIG. 9) for storing the management information in association with the information concerning the positions of the probes to which the target substance has bound (page 25, lines 18-20; page 26, line 18 - page 27, line 23; page 31, lines 2-22; page 32, lines 12-20).

Independent claim 11 recites an analysis system 50 (FIG. 9) for analyzing a target substance by causing the target substance marked with a marker to bind selectively to some of plural types of probes arranged and fixed on a test piece 1 (FIGS. 2 and 4-6) and detecting positions of the probes to which the target substance has bound comprising: means 53 (FIG. 9) for attaching encoded management information to a predetermined location 20 (FIG. 2) on the test piece as ID information peculiar to the test piece 1 using a marker the same as or similar to

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the marker used for marking the target substance (page 25, lines 15-24; page 27, lines 24-26; page 32, lines 4-7); means 54 (FIG. 9) for obtaining information concerning the positions of the probes to which the target substance has bound (page 25, lines 24-26; page 28, lines 1-8; page 30, lines 6-15) and simultaneously detecting the ID information attached to the test piece (page 32, lines 7-11 and line 21 - page 33, line 1); first storing means 61 (FIG. 9) for storing the management information in association with the ID information (page 26, lines 21-25); means 51 (FIG. 9) for decoding the detected ID information by searching through the first storing means 61 referring to the detected ID information to find the management information associated with the detected ID information (page 28, line 21 - page 31, line 2); and second storing means 63 (FIG. 9) for storing the management information in association with the information concerning the positions of the probes to which the target substance has bound (page 27, lines 20-23).

Independent claim 20 recites an analysis system 50 (FIG. 9) for analyzing a target substance by causing the target substance marked with a marker to bind selectively to some of plural types of probes arranged and fixed on a test piece 1 (FIGS. 2 and 4-6) and detecting positions of the probes to which the target substance has bound comprising: means 53 (FIG. 9) for attaching management information peculiar to the test piece to a predetermined location 20 (FIG. 2) on the test piece; means 54 (FIG. 9) for obtaining information concerning the positions of the probes to which the target substance has bound (page 25, lines 24-26; page 28, lines 1-8; page 30, lines 6-15); means 54 for detecting the management information attached to the test piece (page 25, lines 24-26; page 28, lines 1-8; page 30, lines 6-15); and means 60 (FIG. 9) for storing the management information in association with the information concerning the positions

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of the probes to which the target substance has bound (page 25, lines 18-20; page 26, line 18 - page 27, line 23; page 31, lines 2-22; page 32, lines 12-20); wherein obtaining the information concerning the positions of the probes to which the target substance has bound occurs simultaneously with detecting the management information attached to the test piece (page 32, lines 7-11 and line 21 - page 33, line 1).

Independent claim 21 recites an analysis system 50 (FIG. 9) for analyzing a target substance by causing the target substance marked with a marker to bind selectively to some of plural types of probes arranged and fixed on a test piece 1 (FIGS. 2 and 4-6) and detecting positions of the probes to which the target substance has bound comprising: means 53 (FIG. 9) for attaching encoded management information to a predetermined location 20 (FIG. 2) on the test piece as ID information peculiar to the test piece (page 25, lines 15-24; page 27, lines 24-26; page 32, lines 4-7); means 54 (FIG. 9) for obtaining information concerning the positions of the probes to which the target substance has bound (page 25, lines 24-26; page 28, lines 1-8; page 30, lines 6-15); means 54 for detecting the ID information attached to the test piece (page 25, lines 24-26; page 28, lines 1-8; page 30, lines 6-15); first storing means 61 (FIG. 9) for storing the management information in association with the ID information (page 26, lines 21-25); means 51 (FIG. 9) for decoding the detected ID information by searching through the first storing means 61 referring to the detected ID information to find the management information associated with the detected ID information (page 28, line 21 - page 31, line 2); and second storing means 63 (FIG. 9) for storing the management information in association with the information concerning the positions of the probes to which the target substance has bound (page



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27, lines 20-23); wherein obtaining information concerning the positions of the probes to which the target substance has bound occurs simultaneously with detecting the ID information attached to the test piece (page 32, lines 7-11 and line 21 - page 33, line 1).

The claimed elemental means such as the means for attaching management information, means for obtaining information concerning probe positions, means for storing, and means for decoding have the corresponding structure described with reference to the exemplary embodiments set forth above.

**VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 7, 8, 10, 11 and 18-21 are rejected under 35 U.S.C. § 102(e) as being anticipated by Zeleny et al. (US 6,215,894; hereafter “Zeleny”).

Claims 7, 8, 10, 11 and 18-21 are rejected under 35 U.S.C. § 102(e) as being anticipated by Noblett (US 6,362,004).

Claims 7, 8, 10, 11 and 18-21 are rejected under 35 U.S.C. § 102(b) as being anticipated by Perttunen et al. (US 5,968,728; hereafter “Perttunen”).

## **VII. ARGUMENTS**

Argument 1: Zeleny and Perttunen fail to teach or suggest a means for attaching management information peculiar to the test piece to a predetermined location on the test piece using a marker the same as or similar to the marker used for marking the target substance.

In the March 26 Amendment, Appellant argued that the feature of using a marker the same as or similar to the marker used for marking the target substance, as a further modifier on the means for attaching management information peculiar to the test piece to a predetermined location on the test piece, has patentable weight. In the “Response to Arguments” of the Office Action dated April 22, 2004, the Examiner asserts that the this argument is not convincing, because the specification provides that the pattern of the ID information may be attached on the test piece using a spotting device, an ink jet printer, etc. However, the Examiner’s response misses the point of the argument. The fact that the specification discloses that the pattern of the ID information may be attached on the test piece using a spotting device, an ink jet printer, etc. is irrelevant to whether “using a marker the same as or similar to the marker used for marking the target substance” has patentable weight.

Since the limitation of the means for attaching is recited as a means plus function, the details of the recited function, i.e., management information peculiar to the test piece to a predetermined location on the test piece, as well as using a marker the same as or similar to the marker used for marking the target substance, do have patentable weight. These features describe the function of the means for attaching. To the extent the Examiner ignores all the recitations following the initial recitation for a “means for attaching”, this fails to give adequate consideration to functional language in the remainder of the claim.

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In the Advisory Action dated July 30, 2004, the Examiner states that the claims are “directed to a product which requires a means for attaching management information peculiar to the test piece to a predetermined location on the test piece using a marker the same as or similar to the marker used for marking the target substance. The product does not require the marker. The claim only requires the means for attaching management information to the test piece. This means is disclosed in the specification as a spotting device, printer etc.” Further, the Examiner states that the claims do not require the marker. However, independent claims 8, 11, 20 and 21 explicitly recite the marker.

The Examiner asserts that Zeleny discloses the claimed means for attaching management information peculiar to the test piece to a predetermined location on the test piece using a marker the same as or similar to the marker used for marking the target substance of claim 8, but Appellant disagrees. Appellant submits that Zeleny simply discloses a printer 30 that imprints the experiment identifiers on the microchips. See col. 3, lines 26-27. Zeleny is ambiguous with respect to the feature of using a marker the same as or similar to the marker used for marking the target substance. This ambiguity cannot be used against the Appellant. Therefore, claim 8 is not anticipated by Zeleny.

Appellant would submit that the recitations on the marker will provide certain parameters for the applicability of the attachment means and that used for the target substance. Appellant submits that claims 7, 18 and 19 are not anticipated by Zeleny, at least because of their dependence from claim 8.

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Also, claims 10, 11, 20 and 21 are not anticipated by Zeleny for reasons analogous to those for claim 8.

Regarding the rejection of the claims over Perttunen, Appellant has the following comments.

Appellant submits that Perttunen is silent with respect to the feature of claim 8 of the means for attaching management information peculiar to the test piece to a predetermined location on the test piece using a marker the same as or similar to the marker used for marking the target substance. Instead, the reference simply discloses a data writing device 37, which writes data associated with the mapping directly to the support member 36. See col. 4, line 61 - col. 5, line 7. There is no suggestion in the reference of the data writing device of Perttunen having all of the recited features of the means for attaching management information claimed in claim 8. Thus, claim 8 is not anticipated by Perttunen.

Claims 7, 18 and 19 are not anticipated by Perttunen, due to their dependence from claim 8.

Additionally, claims 10, 11, 20 and 21 are not anticipated by Perttunen for reasons analogous to those for claim 8.

Argument 2: Zeleny, Noblett and Perttunen fail to teach or suggest a means for obtaining information concerning the positions of the probes to which the target substance has bound and simultaneously detecting the management information attached to the test piece.

Appellant submits that Zeleny does not teach or suggest the means for obtaining information concerning the positions of the probes to which the target substance has bound and simultaneously detecting the management information attached to the test piece, as recited in claim 8 of the present application. Instead, Zeleny discloses that the bio chip passes to a scanner

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42, which first scans the barcodes 16b and 18b. The system 34 responds by opening file folders 36 that are logically linked to the identifiers. In other words, the barcodes are scanned first, to open a scan protocol and upon completion of the scan protocol, an image map becomes stored. Thus, Zeleny clearly discloses that scanning of the barcodes is not performed simultaneously with the opening of the file folders. See Zeleny at col. 3, lines 30-40 and FIG. 4. Therefore, claim 8 is not anticipated by Zeleny for this reason as well.

Appellant submits that claims 7, 18 and 19 are not anticipated by Zeleny, at least because of their dependence from claim 8.

Also, claims 10, 11, 20 and 21 are not anticipated by Zeleny for reasons analogous to those for claim 8.

For the rejection of claim 8 over Noblett, Appellant submits that the reference does not teach or suggest the claimed means for obtaining information concerning the positions of the probes to which the target substance has bound and simultaneously detecting the management information attached to the test piece. Instead, the Examiner fails to describe where in the reference this feature of the claims of the present invention can be found. To the extent substances can be located in relation to a fiducial mark, the simultaneous detection of management information is not a necessary result and is thus not taught or suggested. Furthermore, the Examiner does not even assert that Noblett discloses this feature of the claims. Appellant submits that Noblett is silent regarding this feature of the claims. Hence, claim 8 is not anticipated by Noblett.

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Claims 7, 18 and 19 are not anticipated by Noblett, at least because of their dependence from claim 8.

Also, claims 10, 11, 20 and 21 are not anticipated by Noblett for reasons analogous to those for claim 8.

Further, Perttunen does not disclose the claimed means for obtaining information concerning the positions of the probes to which the target substance has bound and simultaneously detecting the management information attached to the test piece. Rather, Perttunen discloses that the system of the reference includes a data base 38, which receives a signal associated with the mapping from the processor 30. The signal can include an identification code for the mapping and/or data indicative of the mapping. This disclosure of Perttunen does not correspond to the aforementioned feature of the claims. Perttunen's disclosure does not indicate when detecting of the management information is performed relative to obtaining information concerning the position of the probes. The excerpt does not relate to detecting the management information at all. Instead, Perttunen discloses that data base 38 receives a particular signal, which does not indicate detecting of the management information. Hence, claim 8 is not anticipated by Perttunen for this reason as well.

Claims 7, 18 and 19 are not anticipated by Perttunen, due to their dependence from claim 8.

Additionally, claims 10, 11, 20 and 21 are not anticipated by Perttunen for reasons analogous to those for claim 8.

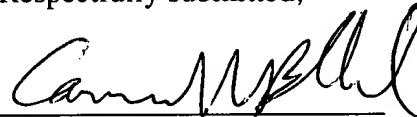
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For the foregoing reasons, Appellant requests the reversal of the rejections of claims 7, 8, 10, 11 and 18-21.

Unless a check is submitted herewith for the fee required under 37 C.F.R. §41.37 and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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Date: November 23, 2004



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**CLAIMS APPENDIX**

**CLAIMS 7, 8, 10, 11, and 18-21 ON APPEAL:**

7. An analysis system according to Claim 8, further comprising means for searching through the means for storing referring to specified management information to find the information concerning the positions of the probes to which the target substance has bound associated with the specified management information.

8. An analysis system for analyzing a target substance by causing the target substance marked with a marker to bind selectively to some of plural types of probes arranged and fixed on a test piece and detecting positions of the probes to which the target substance has bound comprising:

means for attaching management information peculiar to the test piece to a predetermined location on the test piece using a marker the same as or similar to the marker used for marking the target substance,

means for obtaining information concerning the positions of the probes to which the target substance has bound and simultaneously detecting the management information attached to the test piece, and

means for storing the management information in association with the information concerning the positions of the probes to which the target substance has bound.

10. An analysis system according to Claim 11, further comprising means for searching through the second storing means referring to specified management information to find the information concerning the positions of the probes to which the target substance has bound associated with the specified management information.

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11. An analysis system for analyzing a target substance by causing the target substance marked with a marker to bind selectively to some of plural types of probes arranged and fixed on a test piece and detecting positions of the probes to which the target substance has bound comprising:

means for attaching encoded management information to a predetermined location on the test piece as ID information peculiar to the test piece using a marker the same as or similar to the marker used for marking the target substance,

means for obtaining information concerning the positions of the probes to which the target substance has bound and simultaneously detecting the ID information attached to the test piece,

first storing means for storing the management information in association with the ID information,

means for decoding the detected ID information by searching through the first storing means referring to the detected ID information to find the management information associated with the detected ID information, and

second storing means for storing the management information in association with the information concerning the positions of the probes to which the target substance has bound.

18. The analysis system of claim 8, wherein the management information identifies the type and the position of each probe arranged and fixed on the test piece.

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19. The analysis system of claim 8, wherein the management information includes at least one of a type of a base of the test piece, a date of preparing the test piece, substances used as the probes and the positions of the probes.

20. An analysis system for analyzing a target substance by causing the target substance marked with a marker to bind selectively to some of plural types of probes arranged and fixed on a test piece and detecting positions of the probes to which the target substance has bound comprising:

means for attaching management information peculiar to the test piece to a predetermined location on the test piece,

means for obtaining information concerning the positions of the probes to which the target substance has bound,

means for detecting the management information attached to the test piece, and

means for storing the management information in association with the information concerning the positions of the probes to which the target substance has bound,

wherein obtaining the information concerning the positions of the probes to which the target substance has bound occurs simultaneously with detecting the management information attached to the test piece.

21. An analysis system for analyzing a target substance by causing the target substance marked with a marker to bind selectively to some of plural types of probes arranged and fixed on a test piece and detecting positions of the probes to which the target substance has bound comprising:

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means for attaching encoded management information to a predetermined location on the test piece as ID information peculiar to the test piece,

means for obtaining information concerning the positions of the probes to which the target substance has bound,

means for detecting the ID information attached to the test piece,

first storing means for storing the management information in association with the ID information,

means for decoding the detected ID information by searching through the first storing means referring to the detected ID information to find the management information associated with the detected ID information, and

second storing means for storing the management information in association with the information concerning the positions of the probes to which the target substance has bound,

wherein obtaining information concerning the positions of the probes to which the target substance has bound occurs simultaneously with detecting the ID information attached to the test piece.

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**EVIDENCE APPENDIX**

Pursuant to 37 C.F.R. § 41.37(ix), submitted herewith are copies of any evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or any other evidence entered by the Examiner and relied upon by Appellant in the appeal.

NONE

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**RELATED PROCEEDINGS APPENDIX**

Submitted herewith are copies of decisions rendered by a court or the Board in any proceeding identified about in Section II pursuant to 37 C.F.R. § 41.37(c)(1)(ii).

NONE